


IP3 Rec'd PCT/PTO 20 DEC 2003

FORM PTO-1350 (REV. 12-2004)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DEPARTMENT NUMBER 21415-0015US	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				U.S. APPLICATION NO. 21415-0015US # 7	
INTERNATIONAL APPLICATION NO. PCT/AU03/01487		INTERNATIONAL FILING DATE 10 November 2003 (10.11.2003)		PRIORITY DATE CLAIMED 08 November 2002 (08.11.2002)	
TITLE OF INVENTION A METHOD FOR OPTIMISING GENE EXPRESSION USING SYNONYMOUS CODON OPTIMISATION					
APPLICANT(S) FOR DO/EO/US Ian Hector FRAZER					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
1. <input type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.					
2. <input checked="" type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.					
3. <input type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f). The submission must include items (5), (6), (9) and (21) indicated below.					
4. <input type="checkbox"/> The US has been elected (Article 31).					
5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))					
a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).					
b. <input type="checkbox"/> has been communicated by the International Bureau.					
c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).					
6. <input type="checkbox"/> A English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).					
a. <input type="checkbox"/> is attached hereto.					
b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).					
7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))					
a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).					
b. <input type="checkbox"/> had been communicated by the International Bureau.					
c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.					
d. <input type="checkbox"/> have not been made and will not be made.					
8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).					
9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).					
10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).					
Items 11 to 20. below concern document(s) or information included:					
11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.					
12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included					
13. <input type="checkbox"/> A preliminary amendment.					
14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.					
15. <input type="checkbox"/> A substitute specification.					
16. <input type="checkbox"/> A power of attorney and/or address letter.					
17. <input checked="" type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 132 and 37 CFR 1.821-1825					
18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4)					
19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).					
20. <input checked="" type="checkbox"/> Other items or information: copy of Notice (dated 9/30/05); Search Report; Request for Refund; Request for Extension of Time					

U.S. APPLICATION NO. (IF KNOWN; SEE 37 CFR 1.7)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER	
10/534,130		PCT/AU03/01487		21415-0015US	

21. The following fees are submitted: <input type="checkbox"/> a) Basic national fee.....\$300.00 <input type="checkbox"/> b) Examination fee\$200.00 <input type="checkbox"/> c) Search fee.....\$500.00 <div style="text-align: right;">TOTAL OF ABOVE CALCULATIONS =</div>				CALCULATIONS PTO USE ONLY <div style="border: 1px solid black; height: 40px; width: 100%;"></div>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
TOTAL SHEETS	EXTRA SHEETS	NUMBER EXTRA (of each additional 50 or fraction thereof rounded up to a whole number)	RATE		
-100 =	/50 =		x \$250.00		
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 130.00	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	41- 20 =	21	x \$50.00	\$ 1,050.00	
Independent claims	7 - 3 =	4	x \$200.00	\$ 800.00	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$360.00	\$ 360.00	
TOTAL OF ABOVE CALCULATIONS =				\$ 2,340.00	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ 1,170.00	
SUBTOTAL =				\$ 1,170.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+	
TOTAL NATIONAL FEE =				\$ 1,230.00	
Fee for recording the enclose assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				+	
TOTAL FEES ENCLOSED =				\$1,230 (plus EOT fee)	
				Amount to be refunded:	\$
				Amount to be charged:	\$

12/27/2005 MKAYPAGH 00000029 10534130 01 FC:2617 65.00 OP 02 FC:2615 525.00 OP 03 FC:2614 400.00 OP 04 FC:2615 180.00 OP	a. <input checked="" type="checkbox"/> A check in the amount of <u>\$ 1,230.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment To Deposit Account No. <u>08-1641</u> A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status. SEND ALL CORRESPONDENCE TO: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> HELLER EHRMAN LLP 1717 Rhode Island Avenue, N.W. Washington, DC 20036 Customer No. : 26633 </div> <div style="width: 50%;"> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> SIGNATURE  NAME Paul M. Booth </div> <div style="width: 45%;"> Date December 20, 2005 </div> </div> <div style="margin-top: 10px;"> REGISTRATION NUMBER 40,244 </div> </div> </div>
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COMBINED FEE TRANSMITTAL for FY 2005

Effective 12/08/2004. Patent fees are subject to annual revision.

PTO/SB/17 (12-04) (Revised) (For payment of 37 CFR 1.17 fees including (f), (g), (h), & (i))

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,230.00

Complete if Known

Application Number 10/534,130
Filing Date May 6, 2005
First Named Inventor Ian Hector FRAZER
Examiner Name Unassigned
Art Unit Unassigned
Attorney Docket No. 21415-0015US

METHOD OF PAYMENT (check one)

☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None
☒ Deposit Account

Deposit Account Number: 08-1641

Deposit Account Name: Heller Ehrman LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☒ Credit any overpayments and charge any deficiencies

☐ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the deposit account

FEE CALCULATION (continued)

4. PETITION FEES UNDER 37 CFR 1.17 (f) Fee Code: 1462 Fee \$ 400 For petitions filed under: § 1.53(e); § 1.57(a); § 1.182; § 1.183; § 1.378(e); § 1.741(b) Fee Paid

5. PETITION FEES UNDER 37 CFR 1.17 (g) Fee Code: 1463 Fee \$ 200 For petitions filed under: § 1.12; § 1.14; § 1.47; § 1.59; § 1.103(a); § 1.136(b); § 1.295; § 1.296; § 1.377; § 1.550(c); § 1.956; § 5.12; § 5.15; § 5.25 Fee Paid

6. PETITION FEES UNDER 37 CFR 1.17 (h) Fee Code: 1464 Fee \$ 130 For petitions filed under: § 1.19(g); § 1.84; § 1.91; § 1.102(d); § 1.138(c); § 1.313; § 1.314 Fee Paid

7. PROCESSING FEES UNDER 37 CFR 1.17 (i) Fee Code: 1808 (1803 for § 1.221) Fee \$ 130 For petitions filed under: § 1.28(c)(3); § 1.41; § 1.48; § 1.52(d); § 1.53(b)(3); § 1.55; § 1.99(e); § 1.103(b); § 1.103(c); § 1.103(d); § 1.217; § 1.221; § 1.291(c)(5); § 1.497(d); § 3.81 Fee Paid

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
Applicati on Type	Entity Fee (\$)	Small Entity Fee (\$)	Entity Fee (\$)	Small Entity Fee (\$)	Entity Fee (\$)	Small Entity Fee (\$)	Fees Paid (\$)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	135	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

SUBTOTAL (1) \$

2. EXTRA CLAIM FEES

Entity Fee (\$)	Small Entity Fee (\$)	Fee Description
50	25	Each claim in excess of 20 or, for Reissues, each claim in excess of 20 and more than in the original patent
200	100	Each Independent claim in excess of 3 or, for Reissues, each independent claim more than in the original patent
360	180	Multiple dependent claim, if not already paid

Extra Claims		Fee from above	Fee Paid
Total Claims	41	-20** = 21 x 25 =	525
Independent Claims	7	-3** = 4 x 100 =	400

**or number previously paid, if greater; For Reissues see below

Multiple Dependent 180 = 180

SUBTOTAL (2) \$ 1,105

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof (round up to the whole number). See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s)

Total Sheets	Extra Sheets	Number of each additional 50	Fee (\$)	Small Entity Fee (\$)
-100 =	/50 =	x 250	OR	x 125

SUBTOTAL (3) \$

8. OTHER FEES

Entity Fee (\$)	Entity Fee (\$)	Fee Description	Fee Paid
130	65	Surcharge - late filing fee or oath	65
50	25	Surcharge - late provisional filing fee or cover sheet	
130	130	Non-English specification	
2,520	2,520	For filing a request for <i>ex parte</i> reexamination	
920*	920*	Requesting publication of SIR prior to Examiner action	
1,840*	1,840*	Requesting publication of SIR after Examiner action	
120	60	Extension for reply within first month	60
450	225	Extension for reply within second month	
1,020	510	Extension for reply within third month	
1,590	795	Extension for reply within fourth month	
2,160	1,080	Extension for reply within fifth month	
500	250	Filing a brief in support of an appeal	
790	395	Filing a submission after final rejection (37 CFR 1.129(a))	
1,510	1,510	Petition to institute a public use proceeding	
500	250	Petition to revive - unavoidably abandoned application	
1,500	750	Petition to revive - unintentionally abandoned application	
50	50	Processing fee for provisional apps (37 CFR 1.17(q))	
180	180	Submission of Information Disclosure Statement	
1,000	500	Request for oral hearing	
790	395	For each additional invention to be examined (37 CFR 1.129(b))	
790	395	Request for Continued Examination (RCE)	
900	900	Request for expedited examination of a design application	

Other fee (specify)

SUBTOTAL (4+5+6+7+8) \$ 125

* Reduced by Basic Filing Fee Paid

SUBMITTED BY

Name (Print/Type) Paul M. Booth
Signature [Signature]
Registration No. 40,244
Date December 20, 2005

Complete (if applicable)

Telephone 202-912-2000
Customer No. 26633

Rec'd PCT/PTO 20 DEC 2005



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/534,130	Ian Hector Frazer	21415-0015

INTERNATIONAL APPLICATION NO.

PCT/AU03/01487

I.A. FILING DATE

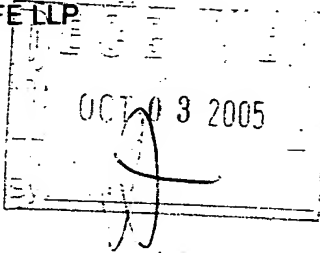
11/10/2003

PRIORITY DATE

11/08/2002

26633

HELLER EHRMAN WHITE & MCAULIFFE LLP
 1717 RHODE ISLAND AVE, NW
 WASHINGTON, DC 20036-3001



CONFIRMATION NO. 8451

371 FORMALITIES LETTER



OC000000017147714

Date Mailed: 09/30/2005

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 05/06/2005
- Copy of the International Search Report filed on 05/06/2005
- Copy of IPE Report filed on 05/06/2005
- Copy of Annexes to the IPE filed on 05/06/2005
- U.S. Basic National Fees filed on 05/06/2005
- Priority Documents filed on 05/06/2005
- Specification filed on 05/06/2005
- Claims filed on 05/06/2005
- Abstracts filed on 05/06/2005
- Paper nucleotide sequence listings filed on 05/06/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37-CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

- **\$130 Surcharge.**

- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", **as well as an amendment specifically directing its entry into the application.** Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 CFR 1.821(e). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821(e) may be submitted in lieu of a new CRF.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- **For Rules Interpretation, call (571) 272-0951**
- **For Patent Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.**
- **Send e-mail correspondence for Patent Software Program Help @ ebc@uspto.gov**

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

BARBARA A CAMPBELL

Telephone: (703) 308-9140 EXT 217

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/534,130	PCT/AU03/01487	21415-0015

FORM PCT/DO/EO/905 (371 Formalities Notice)